PATENT PU020036

Reply to Final Office Action dated: 09/29/06

Response dated: 01/02/07

REMARKS

In the Office Action, the Examiner stated that claims 1-19 are pending in the application and that claims 1-19 stand rejected. None of the Applicant's claims are amended by this response.

In view of the following discussion, the Applicant respectfully submits that none of these claims now pending in the application are anticipated under the provisions of 35 U.S.C. § 102. Thus the Applicant believes that all of these claims are now in allowable form.

Rejections

A. 35 U.S.C. § 102

The Examiner rejected the Applicant's claims 1-19 under 35 U.S.C. § 102(e) as being anticipated by Fujinami et al. (US Patent No. 5,502,573, hereinafter "Fujinami"). The rejection is respectfully traversed.

In this Final Office Action, the Examiner alleges that Fujinami discloses a method of performing a trick mode including all of the aspects of the Applicant's invention. The Applicant respectfully disagrees.

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim" (Lindemann Maschinenfabrik GmbH v. American Hoist & Derrik Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1983)). (emphasis added). The Applicant respectfully submits that Fujinami absolutely fails to teach each and every element of at least the Applicant's claim 1, which specifically recites:

"A method of performing a trick mode on a video signal containing a plurality of original pictures, comprising the steps of:

receiving a trick mode command;

searching the plurality of original pictures in the video signal for a picture compatible with the trick mode; and

initiating the trick mode once the compatible picture is located." (emphasis added).

The Applicant's claim 1 finds support throughout the specification. More specifically, Claim 1 is directed to a method of performing a trick mode on a video signal including searching the plurality of original pictures in the video signal for a

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picture compatible with a received trick mode. The received trick mode is then initiated when the compatible picture is located. More specifically, in support of claim 1, the Applicant in the Specification specifically recites:

"Once the trick mode command is received, at step 214, a search of the plurality of original pictures can be conducted to locate a picture compatible with the trick mode. As shown at step 216, the trick mode can be initiated after the compatible picture is located.

As previously mentioned, a compatible picture is a picture in the video signal that can be used to predict other pictures in the video signal. The compatible picture can be repeatedly displayed for the duration of the freeze trick mode to form a freeze trick mode video signal. In one embodiment of the invention, the compatible picture can be an I picture or a P picture. It is understood, however, that the invention is not limited in this regard, as any other suitable picture can be a compatible picture. By delaying the initiation of the freeze trick mode until a compatible picture is located, such as an I or P picture, it is unnecessary to transmit to a decoder a reference or anchor frame that follows the compatible picture to construct the compatible picture prior to the compatible picture being repeated." (See Specification, page 10, lines 5-18).

As clearly evident from at least the portion of the Applicant's Specification presented above, in the invention of the Applicant, upon the receipt of a trick mode command, the plurality of original pictures of a video signal are searched to locate a picture that is compatible with the received trick mode such that it is unnecessary to transmit to a decoder a reference or anchor frame that follows a picture sent to the decoder after a trick mode command is received.

In contrast to the invention of the Applicant, Fujinami absolutely fails to teach, suggest or anticipate at least "searching the plurality of original pictures in the video signal for a picture compatible with the trick mode" as taught in the Applicant's Specification and claimed by at least the Applicant's claim 1. More specifically, Fujinami teaches an apparatus for reproducing video data from a record medium on which is recorded, in multiplexed form, video data, reference time data representing a reference time, and video time data representing the time at which decoding of the video data reproduced from the record medium should begin. In Fujinami, the reference time data is separated from the reproduced multiplexed data and used to generate timing data. The video data and video time data are temporarily stored in a video buffer and a video time data extractor is connected to the output of the video buffer to extract the video time data from the

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contents of the video buffer. The video buffer also is connected to a video decoder which decodes the video data temporarily stored in the video buffer, the operation of the video decoder being controlled as a function of a comparison between the generated timing data and the extracted video time data. (See Fujinami, Abstract).

The Examiner in the Final Office Action alleges that Fujinami specifically discloses that the system continues to decode frames after a trick play mode has been initiated and that when the system detects that the decoder has surpassed the time stamp data, the system will then cease to decode the current frame and proceed to repeatedly output the previously output frame. The Examiner equates these teachings of Fujinami with the "search" of the Applicant's invention. The Applicant respectfully disagrees.

More specifically, in the teachings of Fujinami pointed out by the Examiner, Fujinami specifically recites:

"Let it be assumed that the pause operation is initiated at the point in time that video data of picture interval P14 is being decoded by video decoder 7, such as illustrated in FIG. 5C. Let it be further assumed that the timing data produced by clock register 26A at the time control circuit 28A produces the pause command exhibits the value STC=N+8000. The clock register responds to this pause command to interrupt its clock signal counting operation, thereby freezing the timing data therein at the value STC=N+8000. As shown in FIG. 5C, although the value of the timing data is frozen, video decoder 7 nevertheless continues to operate and completes its decoding of the video data in picture interval P14. When the video decoder attempts to decode the video data of the next picture interval B13, the video decoding time stamp data DTSV included in the packet header of picture interval B13 is compared in synchronization control circuit 31 to the timing data of clock register 26A. It is seen, however, that since the timing data has remained frozen at STC=N+8000, and since the video decoding time stamp data of picture interval B13 is DTSV=N+9009, the synchronization control circuit senses DTSV>STC. Consequently, and as has been described above, synchronization control circuit 31 controls video decoder 7 to delay the decoding of the video data stored in video buffer 6A. That is, the video decoder waits until an enable control signal is supplied thereto by the synchronization control circuit. Of course, while decoder 7 waits to decode the video data in the next picture interval from video buffer 6A, the video picture that had been previously supplied as an output video signal from the video decoder, namely picture P12, is repeatedly supplied as the output video signal, as shown in FIG. 5D." (See Fujinami, col. 14, line 50 through col. 15, line 14).

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As clearly evident from the teaching of Fujinami presented above, in Fujinami when a pause command is initiated, a clock register responds to this pause command to interrupt its clock signal counting operation, thereby freezing the timing data therein at the value of the time of the pause command. In Fujinami, however, although the value of the timing data is frozen, a video decoder nevertheless continues to operate and completes its decoding of the video data in the picture interval occurring when the pause command was initiated. When the video decoder attempts to decode the video data of a next picture interval, a synchronization control circuit controls the video decoder to delay the decoding of the video data stored in a video buffer. That is in Fujinami, the video decoder waits until an enable control signal is supplied thereto by the synchronization control circuit before continuing decoding.

In contrast to the invention of the Applicant, however, there is absolutely no teaching, suggestion or disclosure in Fujinami for "searching the plurality of original pictures in the video signal for a picture compatible with the trick mode" as taught in the Applicant's Specification and claimed by at least the Applicant's claim 1. That is, in the Final Office Action, the Examiner equated the above presented disclosure of Fujinami with a "search" operation. However, the Applicant submits that the Applicant's invention does not merely claim a search operation, but claims "searching the plurality of original pictures in the video signal for a picture compatible with the trick mode". The Applicant respectfully submits that there is absolutely no teaching, suggestion or disclosure in Fujinami for searching the plurality of original pictures for a picture that is compatible with a received trick mode command as taught and claimed by the Applicant. Instead, Fujinami merely teaches, after a pause command, continuing the decoding of the video data in a picture interval during which a pause command was received.

More specifically, the invention of Fujinami is directed to a system and method for synchronizing video signals with a system clock based on synchronization error. In Fujinami, synchronization is performed by comparing two different timing schemes, e.g., DTSV and STC. (See, e.g., FIG. 5). Video data is stored along with reference time data and video time data. In this way, a video decoder's operation can be controlled and a start point defined for a video location to begin at after a trick mode.

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At col. 14, line 20 through column 15, Fujinami describes how a pause operation works. First, a pause command is initiated, a time control circuit 28A freezes the STC value and video decoding may or may not be continued depending on the difference between the DTSV and STC values. The frame last displayed in the frame is presented by the display for the duration of the pause. In the example provided in Fujinami, the last frame was P14 (see FIG. 5c), and P14 remains displayed until while video continues to be decoded. In FIG. 5d, P12, the last displayed picture in this example, is displayed until decoding begins again, and then, the very next frame is continued.

It is apparent from the teachings of Fujinami, that Fujinami does not perform a search for a picture compatible with a trick mode. Furthermore, Fujinami does not delay the trick mode until the compatible picture is found.

Therefore, the Applicant submits that for at least the reasons recited above, the Applicant's claim 1 is not anticipated by the teachings of Fujinami, and, as such, claim 1 fully satisfies the requirements of 35 U.S.C. § 102 and is patentable thereunder.

Likewise, the Applicant's independent claims 10 and 11 recite similar relevant features as recited in the Applicant's claim 1. As such and for at least the reasons recited above, the Applicant submits that independent claims 10 and 11 are also not anticipated by the teachings of Fujinami, and, as such, fully satisfy the requirements of 35 U.S.C. § 102 and are patentable thereunder.

Furthermore, the Applicant's dependent claims 2-9 and 12-19 depend either directly or indirectly from the Applicant's independent claims 1 and 11, respectively, and recite additional features thereof. As such, the Applicant submits that at least because the Applicant's claims 1 and 11 are not anticipated by the teachings of Fujinami, the Applicant further submits that the Applicant's dependent claims 2-9 and 12-19, which depend either directly or indirectly from the Applicant's claims 1 and 11, respectively, the Applicant's dependent claims 2-9 and 12-19 are also not anticipated by the teachings of Fujinami, and, as such, fully satisfy the requirements of 35 U.S.C. § 102 and are patentable thereunder.

The Applicant reserves the right to establish the patentability of each of the claims individually in subsequent prosecution.

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Conclusion

Thus the Applicant submits that none of the claims, presently in the application, are anticipated under the provisions of 35 U.S.C. § 102.

Consequently, the Applicant believes that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion, it is respectfully requested that the Examiner telephone the undersigned.

No fee is believed due. However, if a fee is due, please charge the additional fee to Deposit Account No. 07-0832.

Respectfully submitted,

Shu Lin

By:

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Reg. No. 52,322 (609) 734-6445

Patent Operations
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Princeton, New Jersey 08543-5312

January 2, 2007

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Docket No.: 4819-001U

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Alexander S. TOM

Confirmation No. 1368

U.S. Patent Application No. 11/557,940

Group Art Unit: 2626

Filed: November 8, 2006

Examiner: N/A

For:

PHRASE PROCESSOR

RESPONSE TO NOTICE TO FILE MISSING PARTS

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Commissioner of Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This is in response to the Notice of Missing Parts of Application dated December 15, 2006, the period for response to which is set to expire on February 15, 2007. Submitted herewith are the following:

- Executed Declaration and Power of Attorney;
- Statutory Basic Filing Fee: \$75.00;
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Please charge the amount of \$490.00, which covers the fees for the above listed items, to Deposit Account 07-1337. Please charge any deficiencies in the enclosed fees to Deposit Account 07-1337 and direct any inquiries in connection with this application directly to the undersigned.

Respectfully submitted,

LOWE HAUPTMAN & BERNER, LLP

Randy A. Noranbrock

Registration No. 42,940

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PATENT

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Alexander S. TOM

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Randy A. Noranbrock

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